## **PART 1-GENERAL**

#### 1.01 RELATED DOCUMENTS

- A. Drawings, Divisions 0 and 1 apply to the Work specified in this Section.
- B. Related work specified elsewhere includes:
  - 1. Painting of mechanical work, Division 15, Mechanical
  - 2. Painting of electrical work, Division 16, Electrical

#### 1.02 REFERENCES

A. Architectural Specification Manual, latest edition, published by Painting and Decorating Contractors of America (PDCA), 11960 Westline Industrial Drive, Ste. 201, St. Louis, MO 63146-3209, telephone (800) 332-7322, is hereinafter referred to as "Architectural Specification Manual" or (ASM).

#### 1.03 SUMMARY

- A. Work includes:
  - 1. Surface preparation, painting, and finishing of exposed interior surfaces in new construction as well as old.
  - 2. Surface preparation, priming, and finish coats specified in this section are in addition to shop priming and surface treatment specified under other sections.
  - 3. Paint exposed surfaces whether or not colors are designated in Finish Schedule, except where a surface or material is specifically indicated not to be painted or is to remain natural. Where an item or surface is not specifically mentioned, paint the same as similar adjacent materials or surfaces. If color or finish is not designated, the Consultant Architect will select from standard colors or finishes available.
  - 4. Do not paint over UL, Factory Mutual, or other code-required labels or equipment name, identification, performance rating, or nomenclature plates.
- B. Section does not include:
  - 1. Pre-finished items
  - 2. Concealed surfaces
  - 3. Operating parts
- C. Applicable definitions are as follows:
  - Conform to ASTM D 16 for interpretation of terms used in this section.
  - 2. The words "paint," "painting," or "paint finishes" as used herein refer to all painted finishes, including clear and opaque liquid applications in addition to terms normally used.
  - 3. The term "Architectural Specification Manual" used in this section refers to the total performance program as defined by the Architectural Specification Manual (Part 1.0213 above).
  - 4. "Inspection and warranty" refers to the total program, including inspection and warranty as defined by and complying with the Architectural Specification Manual (Part 1.0213 above).
  - 5. The words "specifying authority" as used in this section shall mean "Architect or engineer or interior designer or their representatives, as applicable."
  - 6. Where "SSPC" is referred to, the standards of the Structural Steel Painting Council are used. "Inspection agency" is an independent agency acceptable to specifying authority and as endorsed by Specification Services.

# 1.04 SUBMITTALS

### A. General

- 1. Comply with Section 01300, Submittals.
- 2. DO NOT APPLY PAINT until the following are submitted and approved:
  - a. Samples
  - b. Certification
- 3. Submit certification letter from manufacturer stating that proposed materials are the best of their respective kinds and are suitable for their intended purposes.
- Submit to the Consultant Architect, manufacturers' data sheets that demonstrate that all
  paint used has complied to the GreenSeal requirements outlined in LEED™ Credit EQ
  4 2
- 5. Obtain Consultant Architect's approval of materials before ordering.
- 6. Allow ample time for selection of colors.
- 7. Final acceptance of colors and finish will be from samples applied to same substrate as final in-place application.

#### B. Notice

- 1. Provide notification of date of starting work at least 10 days before starting.
- C. Product Data: Submit manufacturer's technical information, including paint label analysis and application instructions for each material proposed for use.

## D. Samples

- 1. Prior to beginning work, submit (3) 8" x 10" drawdowns for the Consultant Architect's review of each color and texture only. Label and identify each material application and location for each coat of each finish sample.
- 2. Submit samples as requested by the Consultant Architect until acceptable sheen, color, and texture are achieved. Furnish as many samples as required by the Consultant Architect until approval is made.

### 1.05 QUALITY ASSURANCE

- A. Single Source Responsibility
  - 1. To the maximum extent practicable, select a single manufacturer to provide all materials required by this section, using additional manufacturers to provide systems not offered by the selected principal manufacturer.
  - 2. For each individual system, provide primer and other undercoat paint produced by same manufacturer as finish coat. Use only thinners approved by paint manufacturer and use only within recommended limits.
  - 3. Use only approved paint products of paint manufacturers listed in Part 2 below or approved under provisions for substitutions specified in Division 1.
- B. Standards: Conform to the minimum standards for materials and work as set forth in the Architectural Specification Manual.

## C. Installer

- 1. Firm with not less than 5 years of successful experience in painting work similar in scope to work of this project.
- 2. Maintain throughout duration of the work a crew of painters who are fully qualified to satisfy requirements of the specifications and the required number of people to complete the work.
- 3. Employ only qualified journeymen in this painting and decorating work; apprentices may be employed on the project to work under the direction of qualified journeymen in accordance with trade regulations.

### 1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to Project Site in original, new, unopened packages and containers bearing the manufacturer's name and label and the following information:
  - Name or title of material
  - 2. Manufacturer's stock number and date of manufacturer
  - 3. Manufacturers name
  - 4. Contents by volume for major pigment and vehicle constituents
  - 5. Thinning instructions
  - 6. Application instructions
  - Color name and number
- B. Store materials in tightly covered containers. Maintain containers in a clean condition, free of foreign materials and residue
- C. Store materials at ambient temperature of between 45 degrees F minimum and 90 degrees F maximum in a well-ventilated area.
- D. Ensure that storage area is neat and orderly. Remove oily rags and waste daily. Comply with local jurisdiction fire regulations.
- E. Take all precautions necessary to prevent fire or explosion of stored materials. Provide inspections of areas routinely. Provide necessary fire-fighting equipment nearby.
- F. Provide 1 gallon overage for each color of paint used on each floor. Label and place below sink of breakroom on corresponding floor.

#### 1.07 PROJECT CONDITIONS

- A. General: Verify conditions at site affecting work to ensure the best installation per industry standards.
- B. Environmental Requirements
  - 1. Apply water-based paints only when temperature of surfaces to be painted and surrounding air temperatures are between 50 degrees F and 90 degrees F.
  - 2. Apply solvent-thinned paints off-site and only when temperature of surfaces to be painted and surrounding air temperatures are between 45 degrees F and 95 degrees F. If off-site does not work due to surfaces being painted, contact Consultant Architect and Owner's Project Manager for scheduling the work.
  - 3. Provide lighting level of at least 80 footcandles measured mid-height at substrate surface.
  - 4. Provide continuous ventilation and heating to prevent accumulation of hazardous fumes and to maintain surface and ambient temperatures above 45 degrees F for 24 hours before, during, and for 48 hours after application of finishes.
  - 5. Do not work when dust or insects are present.
  - 6. Put surfaces in fit conditions for application of finishes.

## 1.08 SCHEDULING

- A. General
  - 1. Perform painting work in proper sequence with work of other trades to avoid damage to finished work.
- B. Primers
  - 1. Provide finish coats which are compatible with prime paints used. Review other section of these specifications- in which prime paints are to be provided to ensure compatibility of total coatings system for various substrates.
  - 2. Upon request, furnish information to other trades on characteristics of finish materials proposed for use.

- 3. Provide barrier coats over incompatible primers or remove and reprime as required.
- 4. Notify the Consultant Architect in writing of any anticipated problems using specified coating systems with substrates primed by others.

### PART 2 – PRODUCTS

#### 2.01 ACCEPTABLE MANUFACTURERS OF PAINT MATERIALS

- A. Where this Article is specifically referred to, topline products labeled Parker, ICI paints, Martin Senour, Benjamin Moore, Fuller O'Brien or Sherwin-Williams may be used.
- B. Other manufacturers and products: Submit Substitution Request prior to Bid Date, see Section 01600.
- C. Where the requirements for a product in Part 3 of this Section do not include a reference to this Article 2.1, manufacturers listed above shall submit Substitution Request before bidding that product.

### 2.02 MATERIALS

- A. See project drawings for specified colors and locations.
- B. Provide brands and qualities of materials for use on work exactly as specified. No claim as to unsuitability or unavailability of the materials specified, or an unwillingness to use specified materials, or an inability to produce first class work with specified materials, will be entertained unless such claims are submitted in writing prior to Bid opening. See Section 01600.
- C. Provide products of a single manufacturer for coating systems applied to each type of surface.
- D. All products must conform to the Greenseal requirements for VOC levels and other ingredients (<a href="http://www.greenseal.org/standards/paints.htm">http://www.greenseal.org/standards/paints.htm</a>) outlined in LEED credit EQ4.2 and shall therefore conform to the following:
  - 1. Maximum VOC level of 150g/l for non-flat paint and 50g/l for flat paint.
  - 2. Maximum VOC level of 250g/l for stain.
  - 3. Maximum VOC level of 350g/l for varnishes and sanding sealers.
  - 4. The product must contain no more than 1.0% by weight of the sum total of aromatic compounds, and shall demonstrate that the following are not used as ingredients in the manufacture of the product: methylene chloride, 1,1,1-trichloroethane, benzene, toluene (methylbenzene), ethylbenzene, vinyl chloride, naphthalene, 1,2-dichlorobenzene, Phthalate esters, isophorone, antimony, cadmium, hexavalent chromium, lead, mercury, formaldehyde, methyl ethyl ketone, methyl isobutyl ketone, acrolein or acrylonitrile.
- E. Coordination: Provide finish coats which are compatible with prime paints used. Provide barrier coats over incompatible primers where required. Notify the Consultant Architect in writing of anticipated problems using specified coating with substrates primed by others.

#### F. Paint Colors:

- 1. A complete schedule of colors will be furnished by the Consultant Architect, selected from ranges of several paint manufacturers or other sources.
- 2. Paint area of each color for observation, review and revisions before batch mixing of colors, or shipping large quantities of that color to job. Allow revisions to "Approved" colors and textures after review of initial area of each color.
- 3. Vary topcoats in shade from preceding coat without affecting finish color.
- 4. Gloss of each paint color to be latex eggshell enamel unless otherwise noted on drawings.

## G. Mixing and Tinting:

- 1. Job mix or job tint only when acceptable to Consultant Architect. Mix only in pails in suitably sized non-ferrous or oxide-resistant metal pans.
- 2. Strain to remove lumps and specks.
- 3. Use tinting colors recommended by manufacturer for the specific type of finish.
- 4. Add non-mercuric fungicidal agent, by manufacturer, to exterior finishes.

## PART 3 – EXECUTION

#### 3.01 EXAMINATION

- A. Verify that spaces are broom clean, with surfaces free of foreign matter.
- B. Moisture Content:
  - 1. Surfaces: Suitably dry and adequately protected from dampness.
  - Follow recommendations of paint manufacturer for allowable moisture for specific type surfaces.
- C. Examine surfaces scheduled to receive paint and finishes for conditions that will adversely affect execution, permanence or quality of work and which cannot be put into an acceptable condition through preparatory work as specified. Report unsatisfactory conditions to Contractor for correction.
- D. Proceed with surface preparation and coating application only after conditions are suitable.

#### 3.02 SURFACE PREPARATION

- A. Do not apply finishes until surfaces are dry and clean and in proper condition to receive finish.
- B. In addition to painting specified, sand and patch prime coats specified under other Sections.
- C. Perform preparation and cleaning procedures in accordance with coating manufacturer's instructions for each substrate condition.
- D. Remove hardware and accessories, machined surfaces, plates, lighting fixtures and similar items in place and not to be finish-painted, or provide surface-applied protection. Reinstall removed items.
- E. Seal wood required for the job to be finished. Prime edges, ends, face, undersides and backsides of counters, cases, cabinets, etc. Use spar varnish for backpriming where transparent finish is required.
  - 1. Back prime interior paneling only where masonry, plaster or other wet wall construction occurs on backside.
  - 2. Seal tops, bottoms of wood doors with heavy coat of varnish type finish compatible with final finish immediately upon delivery to job.
  - 3. Sand to smooth and even surface, then remove dust residue. Clean soiled surfaces, using alcohol wash where required.
  - 4. Putty: Fill nail holes, cracks, open joints and other blemishes with putty compatible with finish system after priming coat has dried. Color putty to match finish.

### F. Wallboard Materials:

1. Test plaster with one percent solution of phenolphthalein in alcohol for dryness and excess acid. Treat excess lime with zinc sulfate solution after observation.

- 2. Rake cracks, scratches and abrasions. Fill with thin layers of patching plaster or joint cement as appropriate.
- 3. Sand smooth; do not raise "nap" of paper on wallboard.

### G. Ferrous Metal Surfaces:

- 1. Remove dirt and grease with mineral spirits.
- 2. Remove dust, mill scale, and defective paint down to sound surface using scraper, sandpaper or wire brush as necessary. Clean rusted surfaces down to bare mill.
- 3. Feather edges of sound paint by grinding.
- 4. Where large areas of bare metal are exposed prime with Rustoleum primer recommended for this exposure.

### H. Galvanized Steel and Aluminum Surfaces:

- 1. Clean surface with solvent to remove oily residue. Dry with clean cloth
- 2. Prime with Rustoleum 2-coat primer system recommended for this exposure.
- I. For surface preparation of other materials not specifically noted, provide appropriate primers and cleaning agents recommended by paint manufacturer.

### 3.03 APPLICATION

- A. Paint materials may be applied to fields of walls, ceiling and painted doors with rollers or airless spray equipment. Brush-paint other work except as specifically indicated. Lay off painted doors with roller of acceptable texture after application of paint.
  - 1. Apply each coat evenly, without brush marks, skipped or missed areas, and without sags, runs or other blemish.
  - 2. Where spray application is permitted, spray each coat without streaking, lapping or pile up of paint, and lay off with roller for light stippled surface.
- B. Omit first coat (primer) on metal surfaces which have been shop-primed and touch-up painted. Apply prime coat to material which is required to be painted or finished, and which has not been prime coated by others.
- C. Elevator doors and frames to receive Sherwin Williams Centurion Waterbased urethane and Sherwin Williams DTM Bonding Primer or approved equal.
- D. Apply each material at not less than the manufacturer's recommended spreading rate, to provide a total dry film thickness of not less that 3.0 mils for the coating systems applied under this section.
- E. Completed Work: Match approved samples for color, texture and coverage. Remove, refinish or repaint work not in compliance with specified requirements.
- F. Paint surfaces behind furniture same as similar exposed surfaces. Paint surfaces behind permanently fixed equipment or furniture with prime coat only, wherever possible.
  - 1. Paint interior surfaces, where visible through registers or grilles, float, non-specular black.
  - 2. Paint backsides of access panels, and removable or hinged covers to match exposed surfaces.
- G. Sand lightly between succeeding coats.
- H. Refinish whole wall where portion of finish has been damaged or is not acceptable.
- I. Make edges of paint adjoining other materials or colors clean and sharp without overlapping. Exercise care that paint does not lap or splatter onto surfaces scheduled to receive other finishes or which are not to be painted.

#### 3.04 CLEANING:

- A. Remove spilled, splashed or splattered paint.
- B. Do not mar surface finish of item being cleaned.
- C. Leave storage space clean and in condition required for equivalent space in project.
- D. Produce a satisfactory finish by painting or repainting as directed, surfaces from which paint spatters cannot satisfactorily by removed.

### 3.05 SCHEDULE OF COATINGS

- A. Gypsum Wallboard:
  - 1. Latex, Eggshell

Bottom Coat: Gypsum wallboard primer, eggshell

Intermediate Coat: Same as top coat.

Top Coat: Latex, Eggshell.

- B. Wood:
  - 1. Varnish, semi-gloss (filled and stained wood).

Filler: Wood Filler

Stain: Interior Wood Stain Sealer: Clear Sanding Seale

Finish: (2) Coats Interior Waterborne or alkyd clear-based semi-gloss varnish

- C. Metal:
  - 1. Shop primed and finished with fast drying acrylic enamel with clear top coat. Flat sheen. Finish and color to match Architect's sample.
- D. Architectural MDF:
  - 1. Stained or painted, as indicated in drawings; 2 coats polyurethane shop finished
  - 2. Sheen level: 20

#### 3.06 COLOR SCHEDULE

A. See project drawings for specified colors and locations:

END OF SECTION 09900